

***Coptis asplenifolia* Salisb.**

spleenwort-leaved goldthread
Ranunculaceae (Buttercup Family)

Status: State Sensitive

Rank: G5S2

General Description: Adapted from Douglas (1999): This species is a perennial rhizomatous herb with yellow to pale brown rhizomes. The stems are erect, 3-1/8 to 4 3/4 inches (8-12 cm) tall in flower to 13 3/4 inches (35 cm) tall in fruit. The shiny, fern-like, evergreen leaves are all basal, stalked, 1 1/2 to 6 3/4 inch (4-17 cm) long, and toothed. The flower stalks are 4 to 12 inches (10-30 cm) long. The inflorescence is a 2 or 3 flowered cyme (a flat or round topped inflorescence in which the terminal flower blooms first) with nodding flowers, minute bracts and 5-7 greenish-white petals. The 5-7 pale greenish-white sepals are 1/4 to 1/2 inch (6-15 mm) long by 1/64 to 1/32 inch (.3-1 mm) wide. The petals are clawed, linear-lanceolate, bent back, flattened and shorter than the sepals. The fruits are follicles (dry fruits, with a slit down one side that spreads open when mature). There are 6 to 10 follicles in a head. Each follicle is oblong, 1/4 to 1/2 inch (7-10 mm) long, with a curved back beak. The shiny dark seeds are about 1/16 inch (2 mm) long.

Identification Tips: *Coptis asplenifolia* is similar in morphology to *Coptis laciniata*, which is more common and widespread in the western Olympics and extends south into northwestern California. The main distinctions are the number of leaflets and height of the flowering stalk relative to the leaves. *C. asplenifolia* has at least 5 leaflets and the flowering stalk is taller than the leaves while in flower. *C. laciniata* has 3 leaflets, and the flowering stalk is shorter than the leaves. All goldthreads have a touch of yellow at the base of the leaf stalk.

Phenology: The species flowers from late April to May.

Range: This species is widespread in coastal areas from southeastern Alaska to southern British Columbia but is at the far southern extent of its range in Washington. In Washington it is found in Snohomish, Clallam and Grays Harbor counties.

Habitat: *Coptis asplenifolia* occurs in moist plant associations in the Western Hemlock Zone or lower Silver Fir Zone. The species occurs in moist, cool sites, in old growth forests with a well-developed litter layer, from 360 to 2200 feet (110-670 m) elevation. In coastal British Columbia *C. asplenifolia* is commonly associated with Girgensohn's sphagnum (*Sphagnum girgensohnii*) and deer fern (*Blechnum spicant*).

Coptis asplenifolia

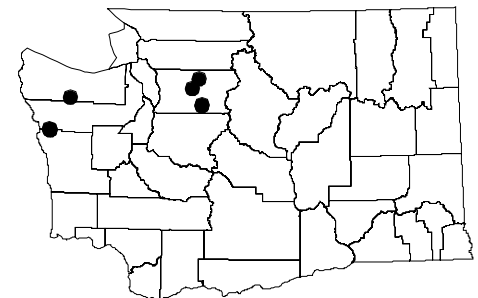
spleenwort-leaved goldthread



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Illustration by Jeanne R. Janish

Known distribution
of *Coptis asplenifolia*
in Washington



● Current (1980+)

○ Historic (older than 1980)

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Ecology: In coastal Washington and Oregon, *Coptis aspleniifolia* occurs adjacent to wetlands, rivers, streams or lakes or on higher ground in areas with high precipitation and in sites with low evaporative stress. Sites are generally on gentle lower slopes, and often northerly aspects. Sites where this species occurs in the western North Cascades appear to be similar in environment to sites farther north, i.e., British Columbia and southeast Alaska. Known populations from the North Cascades occur in old-growth to near-climax forest. There is one record of it growing with boreal bedstraw (*Galium kamtschaticum*), another relatively rare species.

State Status Comments: There are five known occurrences of this species in Washington.

Inventory Needs: Two occurrences are in question and need to be verified. The known occurrences should be revisited and their status assessed.

Threats and Management Concerns: Currently, trampling from recreational use is believed to be the main threat to *Coptis aspleniifolia*. There also have been records of disturbance by trail maintenance crews and foraging deer.

References:

Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 1999. *Illustrated Flora of British Columbia* vol. 4:

Dicotyledons (Orobanchaceae Through Rubiaceae). Ministry of Environment, Lands and Parks, Victoria, British Columbia. 427 pp.

Leshner, R.D. and J.A. Henderson. 1996. Draft recommendation for Spleenwort-leaved Goldthread (*Coptis aspleniifolia* Salisb.). On file with WNHP.